

In the Claims

Claims 1 – 20 are pending in this application. Amended claims

1. (Currently Amended) A method for determining identifier codes for an object associated with a plurality of identifier codes by a corresponding plurality of entities, comprising the activities of:

receiving a first message supporting a commercial transaction and including at least a first identifier code identifying an object, said first identifier code being associated with a first entity and unused by entities different from said first entity for identifying said object in said commercial transaction;

extracting said first identifier code from said received first message;

accumulating, in a first database, object identifier code mapping information from identifier codes derived from data representing messages supporting commercial transactions and sent between entities desiring to effect a commercial transaction;

generating a plurality of messages incorporating said extracted first identifier code, said plurality of messages being for initiating a search of a plurality of different identifier code databases including said first database, said databases linking said first identifier code associated with said first entity to corresponding different identifier codes identifying said object, said different identifier codes being associated with said entities different to said first entity; and

receiving said different identifier codes corresponding to said first identifier code in response to communicating said plurality of messages.

2. (Previously Presented) A method according to claim 1, wherein said commercial transactions comprise purchase or sale of goods related transactions and including the activity of

updating said plurality of databases to incorporate said different identifier codes identifying said object.

3. (Previously Presented) A method according to claim 1, wherein said mapping information supports translation of an identifier code within a message as the message passes through an interface processor.

4. (Previously Presented) A method according to claim 3, including the activity of

communicating said plurality of messages to applications useable for initiating a search of said plurality of different remote identifier code databases and wherein

said mapping information supports translation of an identifier code within a message as the message passes through an interface processor without any action affecting the translation by either a sending system or receiving system.

5. (Previously Presented) A method according to claim 1, wherein a message of said plurality of messages initiates a prioritized search of a database and

an object comprises at least one of, (i) an article of manufacture, (ii) a service and (iii) a non-manufactured item and

an entity comprises at least one of, (a) an object retailer, (b) an object wholesaler, (c) an object distributor, (d) an object manufacturer, (e) an object servicing enterprise and (f) an object seller.

6. (Previously Presented) A method according to claim 5, wherein said prioritized search of said database searches first for a purchaser product identifier code identifying said object and subsequently for a manufacturer product identifier code identifying said object.

7. (Previously Presented) A method according to claim 1, wherein said extracting activity comprises

deriving said first identifier code and a corresponding third identifier code identifying said object from said received first message, and

said generating activity generates a plurality of messages incorporating said derived first and third identifier codes.

8. (Previously Presented) A method according to claim 7, wherein said first identifier code comprises a purchaser product identifier code and said third identifier code comprises a manufacturer product identifier code and

a message of said plurality of messages initiates a prioritized search of a database involving searching first for said purchaser product identifier code and subsequently for a manufacturer product identifier code.

9. (Previously Presented) A method according to claim 1, wherein said mapping information supports translation of an identifier code within a message as the message passes through an interface processor without any action affecting the translation by either a sending system or receiving system.

10. (Previously Presented) A method according to claim 9, wherein said messages supporting commercial transactions are messages effecting commercial transactions including purchase or sale of goods.

11. (Previously Presented) A method according to claim 1, including the activity of communicating said plurality of messages to applications for accessing databases using at least two of, (a) Hypertext Transfer Protocol (HTTP), (b) Simple Object Access Protocol (SOAP) and (c) XML (Extensible Markup language).

12. (Previously Presented) A method according to claim 1, wherein said said method comprises an identifier code mapping application and said identifier code mapping application and one of said plurality of different remote identifier code databases are co-located on the same processor, said processor comprising one of (a) a server, (b) a PC (c) a wireless device, (d) a mainframe computer and (e) another networked processing device.

13. (Previously Presented) A method according to claim 1, wherein messages supporting commercial transactions are messages effecting commercial transactions including purchase or sale of goods and said mapping information supports translation of an identifier code within a message as the message passes through an interface processor without any action affecting the translation by either a sending system or receiving system and at least one of said first and said different identifier codes comprise one of (a) a Universal Product Code and (b) a code associated with a bar code.

14. (Previously Presented) A method for supporting a transaction in accordance with claim 1, wherein

said first message is received from an application initiating a transaction and including the activity of,

forwarding a composite message to a destination application in support of said transaction, said composite message being created including information derived from said first message and including one of said different identifier codes.

15. (Currently Amended) A method for determining a specific identifier code for an object associated with a plurality of identifier codes by a corresponding plurality of entities, comprising the activities of:

receiving a first message supporting a commercial transaction and including at least a first identifier code identifying an object, said first identifier code being associated with a first entity and unused by a second entity different from said first entity for identifying said object in said commercial transaction;

deriving said first identifier code from said received first message;

accumulating, in a first database, object identifier code mapping information from identifier codes derived from data representing messages supporting commercial transactions and sent between entities desiring to effect a commercial transaction;

generating a second message incorporating said derived first identifier code, said second message being for initiating a search of said first database mapping said first identifier code associated with said first entity to a corresponding second identifier code identifying said object and said second message incorporates data representing rules determining conduct of said search of said identifier code database, said second identifier code being associated with said second entity different to said first entity; and

receiving said second identifier code corresponding to said first identifier code in response to communicating said second message.

16. (Currently Amended) A method for determining identifier codes for an object associated with a plurality of identifier codes by a corresponding plurality of entities, comprising the activities of:

receiving a first message supporting a commercial transaction and including at least a first identifier code identifying an object, said first identifier code being associated with a first entity and unused by entities different from said first entity for identifying said object in said commercial transaction;

deriving said first identifier code from said received first message;

accumulating, in a first database, object identifier code mapping information from identifier codes derived from data representing messages supporting commercial transactions and sent between entities desiring to effect a commercial transaction;

generating a plurality of messages incorporating said derived first identifier code, said plurality of messages being for initiating searches of said first database and a remote identifier code database, said databases mapping said first identifier code associated with said first entity to corresponding different identifier codes identifying said object, said different identifier codes being associated with said entities different to said first entity;

receiving said different identifier codes corresponding to said first identifier code in response to communicating said plurality of messages; and

updating said remote identifier code databases to incorporate corresponding received different identifier codes identifying said object.

17. (Currently Amended) A method for providing identifier codes for an object associated with a plurality of identifier codes by a corresponding plurality of entities, comprising the activities of:

receiving from a remote source a first message supporting a commercial transaction and including at least a first identifier code identifying an object, said first identifier code being associated with a first entity and unused by entities different from said first entity for identifying said object in said commercial transaction and said first message requesting determination of a specific identifier code for said object;

deriving said first identifier code from said received first message;

accumulating, in a first database, object identifier code mapping information from identifier codes derived from data representing messages supporting commercial transactions and sent between entities desiring to effect a commercial transaction;

initiating a search of a plurality of different identifier code databases including said first database, said databases linking said first identifier code associated with said first entity to corresponding different identifier codes identifying said object, said different identifier codes being associated with said entities different to said first entity using said extracted first identifier code;

receiving said different identifier codes corresponding to said first identifier code in response to said initiated search of said plurality of different identifier code databases; and

providing said different identifier codes to said remote source.

18. (Previously Presented) A method according to claim 17, including the activity of

generating a record of provision of said different identifier codes for use in at least one of, (a) billing, and (b) creating a commercial transaction record.

19. (Currently Amended) A system for identifier codes for an object associated with a plurality of identifier codes, comprising:

a communication processor for bidirectionally communicating with applications;

a plurality of different identifier code databases including a first database incorporating object identifier code mapping information accumulated from identifier codes derived from data representing messages supporting commercial transactions and sent between entities desiring to effect a commercial transaction;

a first application for,

initiating a search of said plurality of different databases to translate a first identifier code identifying an object associated with a first entity and unused by entities different from said first entity for identifying said object to corresponding different identifier codes identifying said object in said commercial transaction, said different identifier codes being associated with said entities different to said first entity, in response to receiving a message supporting a commercial transaction and including a plurality of corresponding identifier codes identifying said object and provided by applications, and for

updating at least one of said plurality of different databases to incorporate corresponding different identifier codes identifying said object; and

providing said different identifier codes, corresponding to said first identifier code in response to said initiated search of said plurality of different identifier code databases, via said communication processor.

20. (Original) A method according to claim 19, wherein

an object comprises at least one of, (a) an article of manufacture, (b) a service and (c) a non-manufactured item and

an entity comprises at least one of, (a) an object retailer, (b) an object wholesaler, (c) an object distributor, (d) an object manufacturer, (e) an object servicing enterprise and (f) an object seller.